N62604.AR.001757
NCBC GULFPORT
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TRANSCRIPT OF THE PUBLIC MEETING ON THE PROPOSED PLAN FOR SITE 8 FORMER HERBICIDE ORANGE STORAGE SITE AND ASSOCIATED AREAS NCBC GULFPORT MS

4/4/2002

MONICA SCHROEDER & ASSOCIATES

TRANSCRIPTION OF PUBLIC MEETING

In Re: Proposed Plan for Site 8, the Former Herbicide Orange Storage Site and Associated Areas

NAVAL CONSTRUCTION BATTALION CENTER
GULFPORT, MISSISSIPPI
Taken April 4, 2002
(ORIGINAL)

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Naval Construction Battalion Center

Gulfport, Mississippi

April 4, 2002, 6:30 p.m.

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MR. McDANIEL:

Good evening, ladies and gentlemen. I'm Skip McDaniel, community co-chair for the RAB, and we've got to stop meeting this way.

I'd like to welcome you to the ninth public meeting of the cleanup of the dioxin. Your packets, if you haven't gotten them, they've got the meeting outline, a fax sheet, cleanup process, a place for comments and anything else Nancy could think of to put in here.

I think, since we all have been in contact with each other for a number of years, now, since '94, that we can dispense with introductions, except I, at this point, would like to, again, welcome you tonight and introduce our speakers, Gordon Crane and Bob Fisher.

MR. CRANE:

Well, this is not the audience I expected. There are more professional folks in here than community members, but I am still going to go ahead.

I welcome you, again, to this public meeting. And the reason we're here is to fully and completely explain what we intend to do for the remediation and the final closure of the Herbicide

Orange site at Gulfport, and to offer the public and encourage the public to make those comments, questions, comments during this meeting, after this meeting and for the next 30 days to help us bring-- help us get to the decision point that we need to be.

Here's the meeting outline. It's pretty straightforward. What is Herbicide Orange? I'm going to go through the history of the site, how the herbicide got to Gulfport, what dioxin is. Mr. Bob Fisher, he's going to discuss the proposed plan for the cleanup, and then we're going to be open for questions.

What is Herbicide Orange? It's a 50/50 mixture of commercial herbicides, 24D, 245T that were blended to meet military specifications to be used in Vietnam. It was used to defoliate and remove leaves from jungle cover. The purpose, its use was the same as what it was developed for. It was meant to win the war in Vietnam and save lives, American lives at the same time. It was sprayed, aerial sprayed, and it's either mixed with kerosine or diesel fuel.

Agent Orange is a name that it took because of the identification band on the side.

There were two other agents. There was an Agent White and Agent Blue. Agent Orange is the one we are concerned with here.

The history of Herbicide Orange. There again, it was used in the Vietnam War to defoliate and block the cover to the enemy. And the Air Force stored the herbicide at CBC Gulfport back in the late '60s when they were shipping it overseas. They needed a transshipment point. And it was-- Gulfport was selected because of the port, open storage area. And at that time, there was some public reaction to the storage of the material here in Gulfport.

Captain Ingram, of CBC Gulfport at that time, he objected to storing the herbicide at the base. He was-- that was an unsuccessful argument. The decision was made in Washington. The herbicide came to Gulfport, 850,000 gallons or 15,400 drums of material was stored in Gulfport.

In 1970, the EPA banned Herbicide Orange. There was still-- there was a lot of community concern at that time about the storage being there, but once they stored it, rather than being-- Gulfport being a transshipment point to Vietnam, it became more of a semi-permanent

home for the material.

Now, the material was still managed actively. The drums were repaired, material was removed from drums, put in other drums. Just regular maintenance of the stockpile of the herbicide took place to minimize or eliminate any additional leaking that happened. And that was an ongoing effort from the entire period that it stayed in Gulfport.

Those efforts continued until 1977, when the liquid, the herbicide was decanted or taken out of the drums in an operation and put in railcars on the CB base, and those went on the rail line on the west side of the site. I know most everyone here is familiar with that area. And taken to the port of Gulfport, and put on the *VULCANUS*, taken out to sea, shipped to the South Pacific, off Johnson Island, and incinerated.

Now, the Air Force, during this time, they-- right after the removal of the herbicide, they started sampling. And they did extensive sampling. They sampled on the original storage site, the two additional sites that were used for maintenance operations, where herbicide was stored, they sampled the drainage system on the Navy base and

they sampled the drainage system off the Navy base, out to about 15,000 feet, toward Turkey Creek.

Now, they did-- at that time, they did identify low levels of dioxin in the environment in the creek, but back in 1979, when that first sampling was done, it didn't exceed any regulatory limits that required any action on their part at that time, but there-- on the original storage site, it did exceed regulatory limits and they had to take action.

Now, the Air Force, on 30 acres, ultimately, they sampled grids, where they sectioned off the site and sampled each section. And I believe there was something like 2000 samples, a little more that they took at that time. And they identified where the dioxin was on the Navy base, both horizontally and vertically, and those areas were excavated.

They brought in a rotary kiln incinerator, and we have a picture of that right here. It was on the site at the Navy base. And they incinerated about 25,000 to 30,000 cubic yards of soil that was contaminated above one part per billion, which was the action level of the EPA at that time. Resulting

from that was another hazardous waste. The ash was left behind.

Now, when they incinerated the soil, they left behind another waste that had a waste code that had to be delisted and declared a nonhazardous waste in order to bring this site to closure.

In the meantime, if I have my facts right, and I hope I do, Mississippi published their regulations dealing with certain chemicals in the environment, and dioxin was one of those, and it was regulated at just above four parts per trillion. So one day, we're dealing with one part per billion, and the next day, we're dealing with four parts per trillion, and there's quite a spread.

So when that happened, automatically, the ditches were of concern again and any other areas where the dioxin was found at four parts per trillion were of concern and we had a look at these things again.

In 1994, routine and just environmental sampling that we were doing at the base indicated that dioxin was, indeed, leaving the base up on 28th Street. They were getting ready to build a road widening project, part of a defense access road, and we had-- we had indications that we had

dioxin in the ditches along 28th Street and we had to respond to that.

The Navy, at that time, did respond to that, and removed the dioxin, brought it back-- brought the soils back on the original storage site, put in containment areas, where they remain until today.

Once it was discovered that dioxin was leaving the base, it was obvious we had to make a stronger effort and go north of the base and look, and that was done. Sampling was done through swampy areas north of the base, ditches along 28th Street and Canal Road, and that's the road widening project I was talking about.

In 1997 and '98, a large on-base and off-base sampling program began. Over 300 samples were taken, and over eight miles of drainage ditches were sampled to the south of the base, to the north of the base, to the east of the base and on the base. And this yielded information about what-- where the dioxin was.

So we really feel very confident that we know where the dioxin is, how much is there, have identified all the pathways and that information has been fed into this-- was used to bring us to this

point.

What is dioxin? That's what it is, right there. Actually, dioxin is an unintentional by-product for the-- in the manufacturing process, in this case, it was the manufacturing of Herbicide Orange. It's a by-product of forest fires, a by-product of incineration, a by-product of any type of combustion, and it's found-- there are a number of dioxins, I believe it was 75. 15 of them are toxic, and those we concerned ourselves with, and that's what we chased.

Why are we cleaning up the dioxin? It's simple, just what it says here. To protect the human health and the environment. And we're cleaning and containing the chemical to a level that is protective of human health in the environment and to comply with state and federal laws.

Now, we are going to get into the presentation of the proposed plan, and how we're going to do what we are going to do and why we are going to do this. Mr. Bob Fisher, hydrogeologist, with Tetra Tech NUS, who has done-- Bob's done all the investigative work on this job since '92, '93. He's walked every ditch that I've talked about, practically taken every sample

I've talked about, and I don't think there's another authority anywhere around here any more qualified to speak on this subject than Bob.

MR. FISHER:

Thanks, Gordon. Yes. Over here, I guess I'll advise you of this picture, is the meat of the proposed plan. That's along 28th Street with some sediment removal, and in the bottom, left corner there, that's some of the ashes-- actually a pretty recent picture but with some excavation done with it. So we can leave those up.

Before I get into discussing the clinicals, I will just quickly re-cover how these cleanup goals were arrived at. The feasibility study was conducted by the Air Force and the Navy, and that led up into the evaluation of these remediation goals. It also was the way we could formally pull together our remedial alternatives, which I'll go ahead and discuss in a minute.

But this is really the basis of how we got at these alternatives. We needed to look at to what level do we need to clean these ditches, the soil, the sediment that's both on base and off base up to.

And when we looked at these remedial

goals, these RGOs, we came up with a set of numbers that associate not just with where these-- where does contamination exist, but also with scenarios that link together human health with exposure routes.

So, obviously, in areas that may be contaminated closer to resident populations, we need to have lower cleanup levels, as you see, for the on-base surface soil, ash, on-base surface water and sediment. Off-base for shallow water bodies, we're looking at 38 parts per trillion, as well.

But in areas where you have exceptionally deep water, you cannot anticipate any real contact with that. You are not having people go 30, 40 feet under water, so in those areas that are unique like that, we have a little bit higher cleanup level.

Still, all of these are in parts per trillion, which are significantly below that previous cleanup level of one part per billion that Gordon mentioned.

I'll also mention quickly, probably most of us here know this, but the part per trillion, to give you some sort of sense of scale, it's the equivalent of one year in two million years or one-- I'm sorry, one minute in two million years. So that-- that

timeframe gives you an idea just how small of a unit this part per trillion is, and our cleanup goals are virtually down at our ability to even detect. So these are pretty conservative numbers that we've come up with.

What is the proposed plan? It's the document to formally then present our methods or alternative to achieving cleanup of these dioxins.

Now, this proposed plan is based on the feasibility study, which many of you have looked at, presented a series of these alternatives. The proposed plan takes what we think is the best alternative and presents it as a-- in a form like this, so that not only the state but also the public can comment on it.

Coming out of that feasibility study, these are the four alternatives that we have. First is-- this first alternative is required by the EPA for to us look at. No action. This simply says, what happens if we don't do anything? It obviously doesn't cost anything, but it's in there to prevent us from going overboard and spending too much money on a site that doesn't warrant that.

Our second alternative, institutional controls and monitoring is pretty self-explanatory.

It's fencing. You are looking at fencing, which keeps people out. So in this case, if you don't have an exposure by keeping people from getting in contact with the dioxin, then you are, in a sense, preventing an issue there. And, obviously, we would then, in this scenario, there would be continued monitoring to make sure the dioxins did not leave the site.

Alternative 3, which we looked at, was to actually get out into these sediments, excavate the dioxin-contaminated material, bring them back to the original storage site, which we looked at several times there, site A, consolidate them with-- consolidate the dioxin with Portland cement, and then cap the entire material. Here we are. This is Portland cement. This is an actual-- some of our pilot scale testing we did out there. And you can see the Portland cement. This is the contaminated material, and we're blending that together.

And the cap, here, we take that blended material that's with the cement, that makes a very solid sub-base, and then you can see the cap, which basically protects that blended material from erosion and if there's any future activities on that site, they won't impact that blend.

The fourth alternative is very similar to Alternative 3. It's just that you take-- instead of bringing it back to Site 8, you excavate it to an alternate incinerator and it's incinerated at another place and then disposed.

Alternative 4 would require some differences. It would require that you would haul all of the material through city streets, onto local highways, and then off to the incinerator. So this inherently has a little higher risk component with the potential for accidents with many thousands of loads of these dump trucks covering the streets.

To get right into it, the preferred alternative was the Number 3 that we had mentioned. These are meeting all of the criteria the EPA sets for these cleanups, excavating, removing soil and sediments containing dioxin, just like this picture here. We would use surface water controls, these gray plastic barriers, excavate the material between them and march out those dishes.

This material would then be hauled back into Site 8, whether it's on base or off base. This one is not lined, but any dump truck that would be bringing the contamination would be lined with

plastic so we wouldn't have spillage on the road. And then they would be brought back and stockpiled at Site 8. And, again, showing it right here, the Portland cement mixed with it and then a cap put on top.

Again, the Alternative 3 wouldn't be the end of the action. There would be follow-up actions. The site would never be put back into residential use or even a pseudo-residential use, where you would have people operating on this site long-term. The future land use would be restricted to things like a parking and long-term storage of equipment.

The cap would be regularly inspected, that concrete cap on top of this contaminated material, to make sure that there wasn't erosion or some breakage, breaking down of that material.

And long-term, there would probably be some sampling program to ensure the dioxins were not, again, leaving that site. You see here a picture of someone collecting a soil sample. So those would probably continue for some time.

What I'll do real quick, here, is just review the other three alternatives and why they were not selected, and then we'll go back and I'll reiterate on

some of the other points on the one we did.

First, Alternative 1, no action, the site would remain as it is. That site-- this alternative was immediately rejected because it would not be protective, both human health and the environment. While the cost is zero, the long-term benefits were not acceptable, so that was rejected.

Number 2, the second alternative, land uses would be restricted. You are looking at fencing, the incessant sampling, making sure it's staying where we would like it to stay. This is a possible alternative, but it doesn't really completely protect human health, the environment. Large storms, unseen events could potentially remobilize this dioxin and move it downstream, and it certainly does not comply with cleanup regulations. While it's relatively cheap, we did not accept this alternative and moved on.

Alternative 4, like I said earlier, this is similar to Alternative 3 in that you are excavating the soils, you are hauling them and consolidating them, but instead, you are moving it to an off-site incinerator. In this case, there is no local incinerator to handle this, so this material would have to go some distance, probably over a

thousand miles before it would find a place to incinerate it. This long haul creates a lot of potential risk for exposure that doesn't currently exist. It takes it through residential neighborhoods.

And, finally, the cost of moving this to an off-site incinerator would be extremely high. The incinerators charge a lot of money to incinerate dioxin. And you can look at this cost of $61 million to handle something in the neighborhood of 60,000 cubic yards. If you do the math, it's an awful lot of money per cubic yard, with the end result of Alternative 4 being really, at the site, not that much more protective long-term than Alternative 3.

So let's take another look at Alternative 3. It's excavation, consolidation and capping. Again, the soil is being brought back to Site 8. They'll be blended with a cement base. This base will be hardened and then covered with a cap of concrete.

It is absolutely protective of human health, and DEQ does like this alternative in the sense that these dioxins are immobilized permanently, and this prevents the need to take dioxin to the dump trucks and drive the many thousands of miles and

many thousands of dump truckloads.

The cost is not cheap. It is over $8 million, but to achieve the level of protectiveness to the environment, to the people working in and around and living around the base, this does appear to be the best alternative.

And we certainly-- we certainly ask that people take a look at this, and we are asking for input from everyone who would care to comment. We have a 30-day period in which to collect these ideas.

Now, this proposed plan is not a final document, in the sense that you won't know if your comments were involved in this. The ROD is the document that actually sets this action in motion.

So we'll open the floor to comments and questions and start with-- I guess I would also let anyone from the public, I've seen a couple of people come in, if you have questions or comments, we'll address those here. And if you are not comfortable, you can obviously write these down and send them into us. We'll be able to collect your comments in many different ways. Thanks.

MR. CRANE:

Somebody has got to ask for the comments, here. Does anyone have any comments or any questions they want to pose at this time and put on the record?

MS. JOYCE SHAW:

Will these materials also be available--usually there's a depository, the public library, for people that may be wanting to make comments to go back and review?

MR. CRANE:

We have an administrative record at the public library in Gulfport, and all of our public documents, all of our documents relating to this project are there.

MS. JOYCE SHAW:

So if someone does want to go back and review all of this, they have that available to them?

MR. CRANE:

That's correct.

MR. FISHER:

Will there be any more newspaper or public notices?

MR. CRANE:

That's something to be considered, whether we would request public comment in the paper.

And based on-- I don't believe we got the full participation from the public here tonight, and I don't think that would be a bad idea to do, is make another publication in the paper, requesting public comment based on this meeting. Many people know what we're doing, and maybe this meeting was a little inconvenient for them, but I think that would be an appropriate thing to do.

If there's not any more comments or questions or anything, let's-- we can close this portion of the meeting and let's be closed.

MR. FISHER:

I'll stay available around the posters for a little while longer if anyone would like to come and talk to me.

(Meeting concluded at 7:08 p.m.)

CERTIFICATE OF COURT REPORTER

I, MONICA SCHROEDER, Court Reporter and Notary Public, in and for the County of Jackson, State of Mississippi, hereby certify that the foregoing pages, and including this page, contain a true and correct transcript of the proceedings, as taken by me at the time and place heretofore stated, and later reduced to typewritten form by computer-aided transcription under my supervision, to the best of my skill and ability.

I further certify that I am not in the employ of, or related to, any counsel or party in this matter, and have no interest, monetary or otherwise, in the final outcome of the proceedings.

Witness my signature and seal, this the 5th day of April, 2002.

Monica Schroeder, RPR, CRR, CSR #1285
My Commission Expires July 12, 2003

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